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10/619,388	07/14/2003	William C. Kress	66329/24817	5439

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EXAMINER	
MENBERU, BENIYAM	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/619,388	Applicant(s) KRESS, WILLIAM C.	
	Examiner Beniyam Menberu	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 23 discloses "receiving primary device link profile data corresponding to a relationship between an input color space having an associated input gamut and an output color space having an associated output gamut" which is not disclosed in the original specification.

Claim 23 discloses "the device link profile data including a plurality of vertex values, each vertex value having a value associated with a corresponding primary color of the color spaces" which is not disclosed in the original specification.

Claim 23 discloses "means adapted for converting input color image data encoded in the input color space to output color image data in accordance with application of the primary device link profile data, which conversion includes interpolation of values in accordance with displacement from vertex values" which is not disclosed in the original specification.

Claim 23 discloses "means adapted for receiving comparison data corresponding to a rendered image, which rendered image is generated in accordance with the output color image data and input color space data corresponding thereto, the comparison data including result values corresponding with a rendered image relative to a plurality of the vertex values" which is not disclosed in the original specification.

Claim 23 discloses "means adapted for generating modified device like profile data in accordance with received comparison data" which is not disclosed in the original specification.

Claim 23 discloses "means adapted for storing modified device link profile data for use in accordance with subsequent conversions of image data between the input color space and the output color space" which is not disclosed in the original specification.

4. Claim 24 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 24 discloses "generating means adapted for generating comparison data in accordance with the rendered image and received tag data" which is not disclosed in the original specification.

5. Claim 25 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 25 discloses "wherein the generating means further includes means adapted for generating comparison data in accordance with received selection data" which is not disclosed in the original specification.

6. Claim 26 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 26 discloses "receiving primary device link profile data corresponding to a relationship between an input color space having an associated input gamut and an output color space having an associated output gamut" which is not disclosed in the original specification.

Claim 26 discloses "the device link profile data including a plurality of vertex values, each vertex value having a value associated with a corresponding primary color of the color spaces" which is not disclosed in the original specification.

Claim 26 discloses "converting input color image data encoded in the input color space to output color image data in accordance with application of the primary device link profile data" which is not disclosed in the original specification.

Claim 26 discloses "which conversion includes interpolation of values in accordance with displacement from vertex values" which is not disclosed in the original specification.

Claim 26 discloses "receiving comparison data corresponding to a rendered image, which rendered image is generated in accordance with the output color image data and input color space data corresponding thereto, the comparison data including

result values corresponding with a rendered image relative to a plurality of the vertex values" which is not disclosed in the original specification.

Claim 26 discloses "generating modified device like profile data in accordance with received comparison data" which is not disclosed in the original specification.

Claim 26 discloses "storing modified device link profile data for use in accordance with subsequent conversions of image data between the input color space and the output color space" which is not disclosed in the original specification.

7. Claim 27 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 27 discloses "generating comparison data in accordance with the rendered image and received tag data" which is not disclosed in the original specification.

8. Claim 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 28 discloses "generating comparison data in accordance with received selection data" which is not disclosed in the original specification.

Claim Objections

9. Claims 24-25 are objected to because of the following informalities: Claim 24 depends from claim 1 which is cancelled. Appropriate correction is required.

Specification

10. The amendment filed November 21, 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: On page 2 of the amendments to the specification, the first amendment to the specification on the last line states "because the printer primaries are usually Cyan-Magenta-Yellow (CMK)" is not disclosed in the original specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 23, 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6967746 to Walker et al in view of U.S. Patent Application Publication No. US 2003/0214661 A1 to Kondo.

Regarding claim 23, Walker '746 discloses colors space conversion system comprising (column 7, lines 38-41; RGB to CMYK transformation): means adapted for receiving primary device link profile data corresponding to a relationship between an input color space having an associated input gamut and an output color space having an associated output gamut (column 6, lines 7-31; The single [device to device] transform is the device link profile which links the input profile and output profile (device to PCS).; column 7, lines 44-47; source gamut is input gamut and destination gamut is output gamut.), the device link profile data including a plurality of vertex values (column 6, lines 32-35, 59-66; The "points" in source transform represent vertex values which will be mapped to destination value.), each vertex value having a value associated with a corresponding primary color of the color spaces (column 6, lines 32-35, 59-66; The mapping defines the corresponding primary color of the destination device. See column 7, lines 38-57 wherein CMYK is primary color.);

means adapted for converting input color image data encoded in the input color space to output color image data in accordance with application of the primary device link profile data (column 7, lines 38-57; The device link profile (RGB > CMYK combined transform) is used to convert RGB data to CMYK output data.), which conversion

includes interpolation of values in accordance with displacement from vertex values (column 6, lines 7-18; interpolation table 34). However Walker '746 does not disclose means adapted for receiving comparison data corresponding to a rendered image, which rendered image is generated in accordance with the output color image data and input color space data corresponding thereto, the comparison data including result values corresponding with a rendered image relative to a plurality of the vertex values; means adapted for generating modified device like profile data in accordance with received comparison data; and means adapted for storing modified device link profile data for use in accordance with subsequent conversions of image data between the input color space and the output color space.

Kondo '661 discloses:

means adapted for receiving comparison data corresponding to a rendered image (page 6, paragraph 98, 99, 100; The calorimetric values (comparison data) for the color chart 43 and 64 are formed based on CMYK data (rendered image).), which rendered image is generated in accordance with the output color image data and input color space data corresponding thereto (page 6, paragraph 95; link profile 600 generates output cmyk based on input CMYK data), the comparison data including result values corresponding with a rendered image relative to a plurality of the vertex values (page 6, paragraph 89, 91; The $L^*a^*b^*$ values are the comparison result values. The vertex values correspond to the plurality of $L^*a^*b^*$ coordinate points in relation with the CMYK (rendered image).);

means adapted for generating modified device like profile data in accordance with received comparison data (page 7, paragraph 100; Link profile 600 is corrected based on color difference of comparison data (colorimetric values).); and

means adapted for storing modified device link profile data for use in accordance with subsequent conversions of image data between the input color space and the output color space (page 4, paragraph 65; PC 50 stores corrected profile which is used for CMYK conversion).

Having the system of **Walker '746** and then given the well-established teaching of **Kondo '661**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Walker '746** as taught by **Kondo '661**, since **Kondo '661** stated in page 7, paragraph 100, such a modification would provide accuracy for the device link profile 600.

Regarding claim 24, Walker '746 further discloses the color space conversion system of claim 1 further comprising:

means adapted for receiving tag data corresponding to a device associated with the input gamut (column 5, lines 14-25; "Tags" in profiles used for gamut mapping. Column 7, lines 45-46); and

generating means adapted for generating comparison data in accordance with the rendered image and received tag data (column 5, lines 24-35; The comparison data can correspond to the PCS>PCS transform based on modified source transform which is

based on destination (rendered image) and preference of user (Tag information (column 5, lines 23-25)).

Regarding claim 26, see rejection of claim 23 as shown above.

Regarding claim 27, see rejection of claim 24 as shown above,

13. Claims 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6967746 to Walker et al in view of U.S. Patent Application Publication No. US 2003/0214661 A1 to Kondo further in view of U.S. Patent Application Publication No. US 2002/0149786 A1 to Hudson et al.

Regarding claim 25, Walker '746 in view of Kondo '661 teaches all the limitations of claim 24. However Walker '746 in view of Kondo '661 does not disclose the color space conversion system of claim 24 further comprising means adapted for receiving selection data corresponding to a selected output mode of an associated image rendering device, and wherein the generating means further includes means adapted for generating comparison data in accordance with received selection data.

Hudson et al '786 discloses means adapted for receiving selection data corresponding to a selected output mode of an associated image rendering device (page 5, paragraph 54; Author selects rendering choice (output mode) using 702 for printer (rendering device).), and wherein the generating means further includes means adapted for generating comparison data in accordance with received selection data (page 5, paragraph 64, 65, 66; The preview data for the author is based on rendering

choice selected through 716 and 702. The preview data can be used as comparison data for comparing how print output looks like.).

Having the system of ***Walker '746 in view of Kondo '661*** and then given the well-established teaching of ***Hudson et al '786***, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of ***Walker '746 in view of Kondo '661*** as taught by ***Hudson et al '786***, since ***Hudson et al '786*** stated in page 1, paragraph 9 and page 5, paragraph 66, such a modification would provide printing output based on comparison to produce an output as required by the author.

Regarding claim 28, see rejection of claim 25 as shown above.

Other Prior Art Cited

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 7227666 to MacLeod discloses color proof system.

U.S. Patent No. 7046393 to Zeng discloses color management system.

U.S. Patent Application Publication No. US2002/0051158 A1 to Ohkubo discloses profile processing system.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

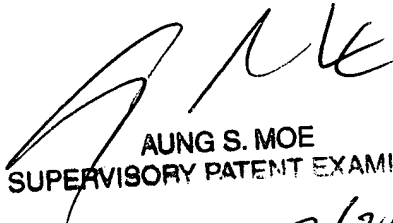
For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Beniyam Menberu

BM

01/31/2008


AUNG S. MOE
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2/2/08